



CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005



Job No.: CTCE/BBMP/W.No.08/KRIDL/SDBC/AIV/2014-15

17.07.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	Asst. Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Agency	Technical Manager, KRIDL, Bangalore.
Name of the Work	Improvements to roads and drains at Amco Layout, Hebbal Sarawar and Balaji Layout in Ward No.08, Kodigehalli Sub Division, BBMP, Bangalore.
Reference	AEE/KH/665/2014-15 Dated: 04.06.2014
Source / Location	Hot Mix Plant, Bangalore
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	17.07.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	387	388	22.06
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	85	86	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	302	302	
4	Aggregate Impact value = percent fines $100 * (W_2/W_1)\%$	21.96	22.16	

Comments:

→ Maximum allowable Aggregate Impact value for Semi Dense Bituminous Concrete is 27

Note:

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- Ⓑ The results indicated above are based on the tests carried out on the samples received in the
- Ⓒ Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No.: CTCE/BBMP/W.No.08/KRIDL/SDBC/Shape_T/2013-14

: 17.07.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	: Asst. Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Agency	: Technical Manager, KRIDL, Bangalore.
Name of Work	: Improvements to roads and drains at Amco Layout, Hebbal Sarawar and Balaji Layout in Ward No.08, Kodigehalli Sub Division, BBMP, Bangalore.
Reference	: AEE/KH/665/2014-15 Dated: 04.06.2014
Technical Reference	: IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	: Semi Dense Bituminous Concrete
Date of Testing	: 17.07.2014

Result : Flakiness Index = **11.98%**

Elongation Index = **13.26%**

Result : Combined Flakiness & Elongation index **25.24%**

Comments:

Maximum allowable Flakiness & Elongation Index for Semi Dense Bituminous Concrete is 30%

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Job No.: CTCE/BBMP/W.No.08/KRIDL/SDBC/Stripping/2014-15

19.07.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	Asst. Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Agency	Technical Manager, KRIDL, Bangalore.
Name of the work	Improvements to roads and drains at Amco Layout, Hebbal Sarawar and Balaji Layout in Ward No.08, Kodigehalli Sub Division, BBMP, Bangalore.
Reference	AEE/KH/665/2014-15 Dated: 04.06.2014
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	19.07.2014

Type of binder : 80/100
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.2	3.30	96.70
2	3.3		
3	3.4		

Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/W.No.08/KRIDL/WMM/Gradation/2014-15

01.07.2014

GRADATION FOR WMM MORTH TABLE-400-11

Client : Asst. Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.

Agency : Technical Manager, KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Amco Layout, Hebbal Sarawar and Balaji Layout in Ward No.08, Kodigehalli Sub Division, BBMP, Bangalore.

Reference : AEE/KH/665/2014-15 Dated: 04.06.2014

Date of Testing : 01.07.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 7075

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	150	150	2.1	97.9	95-100
22.4	2510	2660	37.6	62.4	60-80
11.2	1250	3910	55.3	44.7	40-60
4.75	1020	4930	69.7	30.3	25-40
2.36	695	5625	79.5	20.5	15-30
0.600	600	6225	88.0	12.0	8-22
0.075	550	6775	95.8	4.2	0-8

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